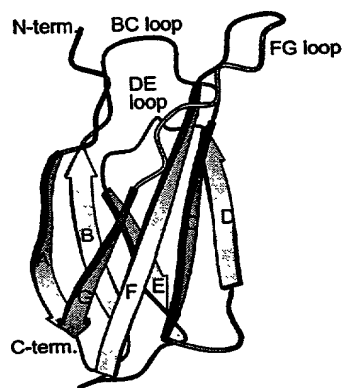
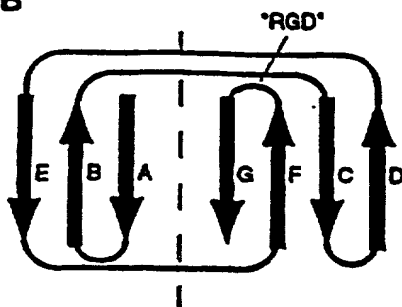


A



B



FIGURES 1A-B

NdeI

CATATGCAGGTTTCTGATGTTCCGCGTGACCTGGAAGTTGTTGCTGCGACCCCGACTAGC
MetGlnValSerAspValProArgAspLeuGluValValAlaAlaThrProThrSer
-2 -1 1 10

BclI PvuII

PstI

BsiWI

CTGCTGATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTACCGTATCAGCTACGGT
LeuLeuIleSerTrpAspAlaProAlaValThrValArgTyrTyrArgIleThrTyrGly
20 30

EcoRI

GAAACCGGTGGTAACTCCCCGGTTCAGGAATTCACCTGTACCTGGTTCCAAGTCTACTGCT
GluThrGlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAla
40 50

SalI

Bst1107I

ACCATCAGCGGCCTGAAACCGGGTGTCTGACTATACCATCACTGTATACGCTGTTACTGGC
ThrIleSerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGly
60 70

SacI

XhoI

CGTGGTGACAGCCCAGCGAGCTCCAAGCCAATCTCGATTAACTACCGTACCTAGTAACTC
ArgGlyAspSerProAlaSerSerLysProIleSerIleAsnTyrArgThr
80 90

BamHI

GAGGATCC

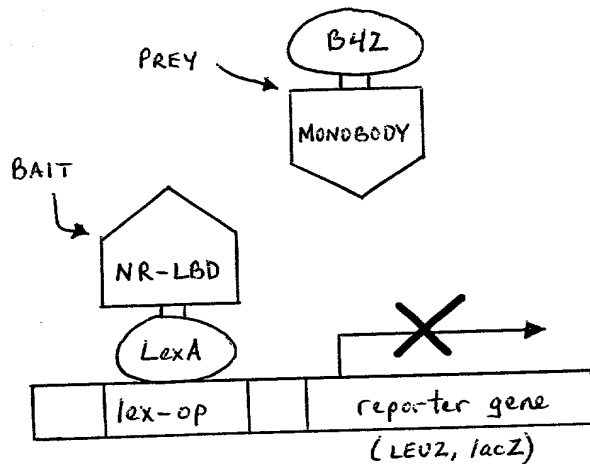
FIGURE 2

[illegible]

Figure 3B

Figure 1: Schematic representation of the experimental design. The diagram shows a sequence of steps: 1. The participant is presented with a stimulus (a word). 2. The participant responds (presses a key). 3. The response is recorded. 4. The response is compared with the correct answer. 5. The participant receives feedback (correct/incorrect). 6. The participant is presented with the next stimulus. 7. The process repeats. The diagram is divided into two main sections: 'Stimulus presentation' and 'Response recording'. The 'Stimulus presentation' section includes steps 1 and 2. The 'Response recording' section includes steps 3, 4, and 5. The 'Feedback' section includes step 6. The 'Next stimulus' section includes step 7.

NO INTERACTION

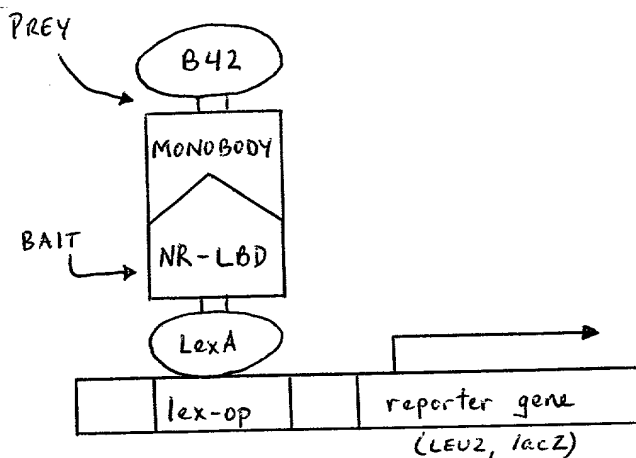


PHENOTYPE

- NO GROWTH IN -LEU MEDIA
- NO β -GALACTOSIDASE ACTIVITY

FIGURE 4A

POSITIVE INTERACTION



PHENOTYPE

- GROWTH IN -LEU/+GALACTOSE MEDIA
- β -GALACTOSIDASE ACTIVITY
- NO GROWTH IN -LEU/-GALACTOSE MEDIA

FIGURE 4B

ATGGACTACAAGGACGACGATGACAAGGGTATGCAGGTTTCTGATGTTCCGACCGACCTG
MetAspTyrLysAspAspAspLysGlyMetGlnValSerAspValProThrAspLeu

PvuII

GAA GTT G TT G CT G CG A C C C C G A C T A G C C T G C T G A T C A G C T G G G A T G C T C C T NNKNNKNNK
GluValValAlaAlaThrProThrSerLeuLeuIleSerTrpAspAlaProXaaXaaXaa

EcoRI

NNKNNKTATTACCGTATCACGTACGGTGAAACCGGTGGTAACTCCCCGGTTCAGGAATTC
XaaXaaTyrTyrArgIleThrTyrGlyGluThrGlyGlyAsnSerProValGlnGluPhe

SalI

ACTGTACCTGGTTCCAAGTCTACTGCTACCATCAGCGGCCTGAAACCGGGTGTCTGACTAT
ThrValProGlySerLysSerThrAlaThrIleSerGlyLeuLysProGlyValAspTyr

ACCATCACTGTATACGCTGTTACTGGCNNKNNKNNKNNKNNKNNKNNKNNKTCCAAGCCAATC
ThrIleThrValTyrAlaValThrGlyXaaXaaXaaXaaXaaXaaXaaSerLysProIle

KpnI

TCGATTAACTACCGTACCACTGGTACCGGTGGTTCCTCCAAAAAAGAAGAGAAAGGTA
SerIleAsnTyrArgThrSerGlyThrGlyGlySerProProLysLysLysArgLysVal

GCTGGTATCAATAAAGATATCGAGGAGTGCAATGCCATCATTGAGCAGTTTATCGACTAC
AlaGlyIleAsnLysAspIleGluGluCysAsnAlaIleIleGluGlnPheIleAspTyr

CTGCGCACCGGACAGGAGATGCCGATGGAAATGGCGGATCAGGCGATTACGTGGTGCCG
LeuArgThrGlyGlnGluMetProMetGluMetAlaAspGlnAlaIleAsnValValPro

GGCATGACGCCGAAAACCAATTCTTCACGCCGGGCCCGCATCCAGCCTGACTGGCTGAAA
GlyMetThrProLysThrIleLeuHisAlaGlyProProIleGlnProAspTrpLeuLys

TCGAATGGTTTTTCATGAAATTGAAGCGGATGTTAACGATACCAGCCTCTTGCTGAGTGGA
SerAsnGlyPheHisGluIleGluAlaAspValAsnAspThrSerLeuLeuLeuSerGly

XhoI SphI

GATTAACTCGAGGCATGC

Asp...

FIGURE 5

ATGGGTAAGCCTATCCCTAACCCCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT
MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAGAAGAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC
ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCG
IleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTACCGTGGTGCCGGGCATGACGCCGAAAACCATTCCTTCACGCCGGGCCG
AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTTCATGAAATTGAAGCGGATGTTAAC
ProIleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn

KpnI

HindIII

SacI

GATACCAGCCTCTTGCTGAGTGAGATGCCCTCCAAGCTTGGTACCGAGCTCGGATCTATG
AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CAGGTTTCTGATGTTCCGACCGACCTGGAAGTTGTTGCTGCGACCCCGNNSNNSNNSNNS
GlnValSerAspValProThrAspLeuGluValValAlaAlaThrProXaaXaaXaaXaa

PvuII

PstI

NNSNNSNNSACTAGCCTGCTGATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTAC
XaaXaaXaaThrSerLeuLeuIleSerTrpAspAlaProAlaValThrValArgTyrTyr

EcoRI

CGTATCACGTACGGTGAAACCGGTGGTAACTCCCCGGTTCAGGAATTCAGTGTACCTGGT
ArgIleThrTyrGlyGluThrGlyGlyAsnSerProValGlnGluPheThrValProGly

SalI

TCCAAGTCTACTGCTACCATCAGCGGCCTGAAACCGGGTGTCGACTATACCATCACTGTA
SerLysSerThrAlaThrIleSerGlyLeuLysProGlyValAspTyrThrIleThrVal

SacI

TACGCTGTACTGGCCGTGGTGACAGCCCAGCGAGCTCCAAGCCAATCTCGATTAACCTAC
TyrAlaValThrGlyArgGlyAspSerProAlaSerSerLysProIleSerIleAsnTyr

XhoI SphI

CGTACCTAGTAACTCGAGGCATGC

ArgThr•••••

FIGURE 6

ATGGGTAAGCCTATCCCTAACCCCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT
MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAGAAGAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC
ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCG
IleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACTGGTGCCGGGCATGACGCCGAAAACCATTCCTTCACGCCGGGCCG
AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTTCATGAAATTGAAGCGGATGTTAAC
ProIleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn

KpnI

HindIII SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG
AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CAGGTTTCTGATGTTCCGACCGACCTGGAAGTTGTTGCTGCGACCCGACTAGCCTGCTG
GlnValSerAspValProThrAspLeuGluValValAlaAlaThrProThrSerLeuLeu

PvuII

ATCAGCTGGGATGCTCCTNNKNNKNNKNNKNNKTATTACCGTATCACGTACGGTGAAACC
IleSerTrpAspAlaProXaaXaaXaaXaaXaaTyrTyrArgIleThrTyrGlyGluThr

EcoRI

GGTGGTAAGTCCCCGGTTCAGGAATTCAGTGTACCTGGTTCCAAGTCTACTGCTACCATC
GlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAlaThrIle

Sall

AGCGGCCTGAAACCGGGTGTGCGACTATACCATCACTGTATACGCTGTTACTGGCNNKNNK
SerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGlyXaaXaa

XhoI SphI

NNKNNKNNKNNKNNKTCCAAGCCAATCTCGATTAACTACCGTACCTAGTAACCTCGAGGCA
XaaXaaXaaXaaXaaSerLysProIleSerIleAsnTyrArgThr.....

TGCATCTAGAGGGCCGCATCATGTAATTAGTTATGTCACGCTTA

FIGURE 7

1987-09-14

ATGGGTAAGCCTATCCCTAACCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT
MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAAGAAGAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC
ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCG
IleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACTGGTGCCGGGCATGACGCCGAAAACCATTCCTTCACGCCGGGCCG
AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTTCATGAAATTGAAGCGGATGTTAAC
ProIleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn

KpnI

HindIII

SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG
AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CGTGTTTCTGATGTTCCGCGTGACCTGGAAGTTGTTGCTGCGACCCGACTAGCCTGCTG
ArgValSerAspValProArgAspLeuGluValValAlaAlaThrProThrSerLeuLeu

PvuII

ATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTACCGTATCACGTACGGTGAAACC
IleSerTrpAspAlaProAlaValThrValArgTyrTyrArgIleThrTyrGlyGluThr

EcoRI

GGTGGTAACTCCCGGTTTCAGGAATTCAGTGTACCTGGTTCCAAGTCTACTGCTACCATC
GlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAlaThrIle

SalI

AGCGGCCTGAAACCGGGTGTCTGACTATACCATCACTGTATACGCTGTTACTGGC**NNNNK**
SerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGlyXaaXaa

NNKAAGCCAATCTCGATTAA
XaaXaaXaaXaaXaaXaaXaaXaaXaaXaaXaaXaaXaaXaaXaaXaaLysProIleSerIleAsn

XhoI SphI

TACCGTACCTAGTAACCTCGAGGCATGC
TyrArgThr•••••

FIGURE 8

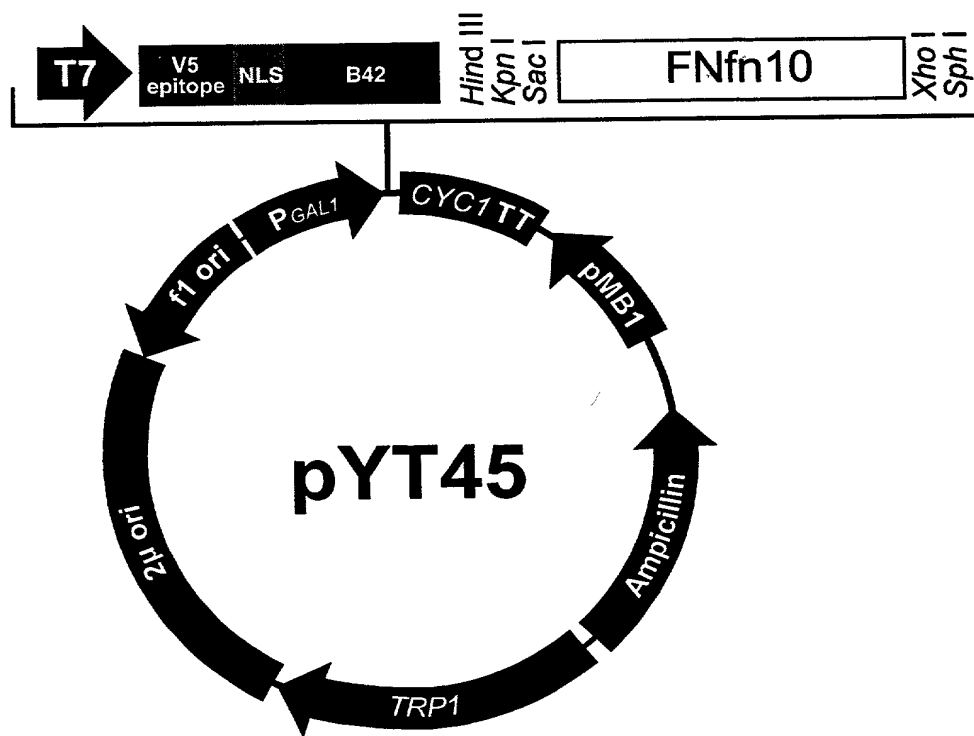


FIGURE 9

ATGGGTAAGCCTATCCCTAACCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT
MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAAGAAGAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC
ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCG
IleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACGTGGTGCCGGGCATGACGCCGAAAACCATTCTTCACGCCGGGCCG
AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTTCATGAAATTGAAGCGGATGTTAAC
ProIleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn

HindIII/KpnI/SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG
AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CAGGTTTCTGATGTTCCGACCGACCTGGAAGTTGTTGCTGCGACCCCGACTAGCCTGCTG
GlnValSerAspValProThrAspLeuGluValValAlaAlaThrProThrSerLeuLeu

PvuII

PstI

ATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTACCGTATCACGTACGGTGAAACC
IleSerTrpAspAlaProAlaValThrValArgTyrTyrArgIleThrTyrGlyGluThr

EcoRI

GGTGGTAACTCCCCGGTTCAGGAATTCAGTGTACCTGGTTCCAAGTCTACTGCTACCATC
GlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAlaThrIle

SalI

AGCGGCCTGAAACCGGTGTCGACTATACCATCACTGTATACGCTGTTACTGGCCGTGGT
SerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGlyArgGly

SacI

XhoI SphI

GACAGCCCAGCGAGCTCCAAGCCAATCTCGATTAACTACCGTACCTAGTAACTCGAGGCA
AspSerProAlaSerSerLysProIleSerIleAsnTyrArgThr.....

TGC

FIGURE 10

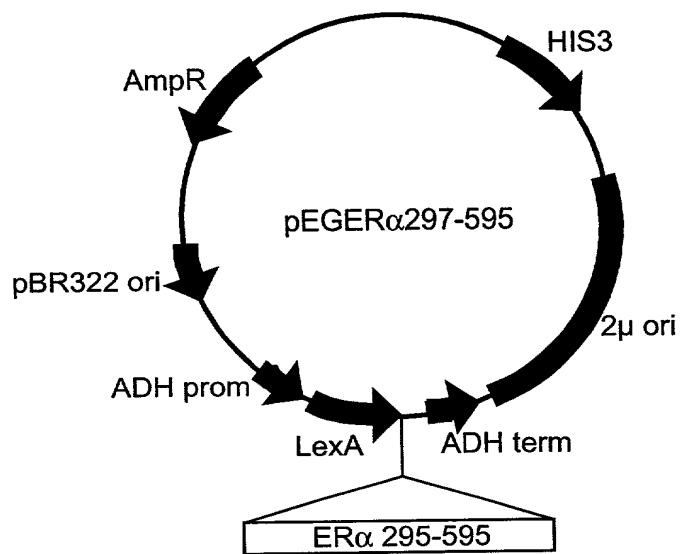


FIGURE 11

ATGAAAGCGTTAACGGCCAGGCAACAAGAGGTGTTTGATCTCATCCGTGATCACATCAGC
MetLysAlaLeuThrAlaArgGlnGlnGluValPheAspLeuIleArgAspHisIleSer

CAGACAGGTATGCCGCCGACGCGTGCAGGAAATCGCGCAGCGTTTGGGGTTCCGTTCCTCCA
GlnThrGlyMetProProThrArgAlaGluIleAlaGlnArgLeuGlyPheArgSerPro

AACGCGGCTGAAGAACATCTGAAGGCGCTGGCACGCAAAGGCGTTATTGAAATTGTTTCC
AsnAlaAlaGluGluHisLeuLysAlaLeuAlaArgLysGlyValIleGluIleValSer

GGCGCATCACGCGGGATTTCGTCTGTTGCAGGAAGAGGAAGAAGGGTTGCCGCTGGTAGGT
GlyAlaSerArgGlyIleArgLeuLeuGlnGluGluGluGluGlyLeuProLeuValGly

cgtgtggctgccggtgaaccacttctggcgcaacagcatattgaagggtcattatcaggtc
ArgValAlaAlaGlyGluProLeuLeuAlaGlnGlnHisIleGluGlyHisTyrGlnVal

GATCCTTCCTTATTCAAGCCGAATGCTGATTTCTGCTGCGCGTCAGCGGGATGTCGATG
AspProSerLeuPheLysProAsnAlaAspPheLeuLeuArgValSerGlyMetSerMet

AAAGATATCGGCATTATGGATGGTGAAGTGGTGGCAGTGCATAAACTCAGGATGTACGT
LysAspIleGlyIleMetAspGlyAspLeuLeuAlaValHisLysThrGlnAspValArg

AACGGTCAGGTCGTTGTGCGCACGTATTGATGACGAAGTTACCGTTAAGCGCCTGAAAAAA
AsnGlyGlnValValValAlaArgIleAspAspGluValThrValLysArgLeuLysLys

CAGGGCAATAAAGTCGAACTGTTGCCAGAAAATAGCGAGTTTAAACCAATTGTCGTAGAT
GlnGlyAsnLysValGluLeuLeuProGluAsnSerGluPheLysProIleValValAsp

CTTCGTCAGCAGAGCTTCACCATTGAAGGGCTGGCGGTTGGGGTTATTGCAACGGCGAC
LeuArgGlnGlnSerPheThrIleGluGlyLeuAlaValGlyValIleArgAsnGlyAsp
SacI

EcoRI HindIII

TGGCTGGAATTCAAGCTTGAGCTCGGCGGCAGCGGTATGATCAAACGCTCTAAGAAGAAC
TrpLeuGluPheLysLeuGluLeuGlyGlySerGlyMetIleLysArgSerLysLysAsn

AGCCTGGCCTTGTCCTGACGGCCGACCAGATGGTCAGTGCCTTGTTGGATGCTGAGCCC
SerLeuAlaLeuSerLeuThrAlaAspGlnMetValSerAlaLeuLeuAspAlaGluPro

HindIII

CCCATACTCTATTCCGAGTATGATCCTACCAGACCCTTCAGTGAAGCTTCGATGATGGGC
ProIleLeuTyrSerGluTyrAspProThrArgProPheSerGluAlaSerMetMetGly

FIGURE 12A

TTACTGACCAACCTGGCAGACAGGGAGCTGGTTCACATGATCAACTGGGCGAAGAGGGTG
LeuLeuThrAsnLeuAlaAspArgGluLeuValHisMetIleAsnTrpAlaLysArgVal

XbaI

CCAGGCTTTGTGGATTTGACCCTCCATGATCAGGTCCACCTTCTAGAATGTGCCTGGCTA
ProGlyPheValAspLeuThrLeuHisAspGlnValHisLeuLeuGluCysAlaTrpLeu

GAGATCCTGATGATTGGTCTCGTCTGGCGCTCCATGGAGCACCCAGTGAAGCTACTGTTT
GluIleLeuMetIleGlyLeuValTrpArgSerMetGluHisProValLysLeuLeuPhe

GCTCCTAACTTGCTCTTGACAGGAACCAGGGAAAATGTGTAGAGGGCATGGTGGAGATC
AlaProAsnLeuLeuLeuAspArgAsnGlnGlyLysCysValGluGlyMetValGluIle

PstI

TTCGACATGCTGCTGGCTACATCATCTCGGTTCCGCATGATGAATCTGCAGGGAGAGGAG
PheAspMetLeuLeuAlaThrSerSerArgPheArgMetMetAsnLeuGlnGlyGluGlu

TTTGTGTGCCTCAAATCTATTATTTTGCTTAATTCTGGAGTGACACATTTCTGTCCAGC
PheValCysLeuLysSerIleIleLeuLeuAsnSerGlyValTyrThrPheLeuSerSer

ACCCTGAAGTCTCTGGAAGAGAAGGACCATATCCACCGAGTCCTGGACAAGATCACAGAC
ThrLeuLysSerLeuGluGluLysAspHisIleHisArgValLeuAspLysIleThrAsp

PstI

ACTTTGATCCACCTGATGGCCAAGGCAGGCCTGACCCTGCAGCAGCAGCACCAGCGGCTG
ThrLeuIleHisLeuMetAlaLysAlaGlyLeuThrLeuGlnGlnGlnHisGlnArgLeu

GCCCAGCTCCTCCTCATCCTCTCCACATCAGGCACATGAGTAACAAAGGCATGGAGCAT
AlaGlnLeuLeuLeuIleLeuSerHisIleArgHisMetSerAsnLysGlyMetGluHis

CTGTACAGCATGAAGTGCAAGAACGTGGTGCCCCTCTATGACCTGCTGCTGGAGATGCTG
LeuTyrSerMetLysCysLysAsnValValProLeuTyrAspLeuLeuLeuGluMetLeu

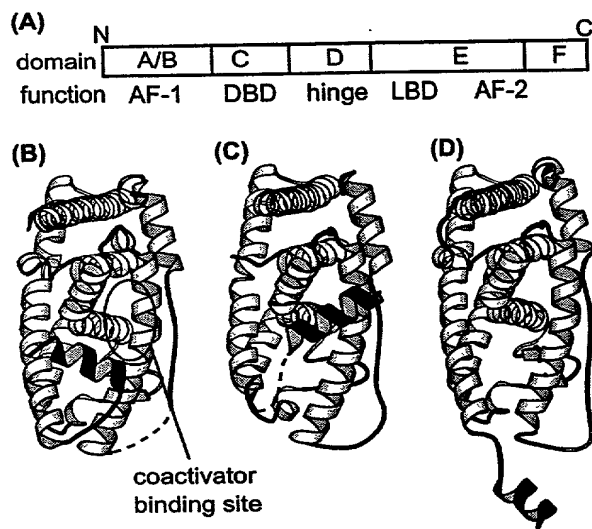
GACGCCCACCGCCTACATGCGCCCACTAGCCGTGGAGGGGCATCCGTGGAGGAGACGGAC
AspAlaHisArgLeuHisAlaProThrSerArgGlyGlyAlaSerValGluGluThrAsp

CAAAGCCACTTGCCCACTGCGGGCTCTACTTCATCGCATTCTTGCAAAAGTATTACATC
GlnSerHisLeuAlaThrAlaGlySerThrSerSerHisSerLeuGlnLysTyrTyrIle

XhoI

ACGGGGGAGGCAGAGGGTTTCCCTGCCACAGTCTGACTcgag
ThrGlyGluAlaGluGlyPheProAlaThrVal...

FIGURE 12B



FIGURES 13A-D

a. E2#10

Treatment	β -galactosidase activity (Miller units)
E2	~380
ICI	~0
OHT	~0
RAL	~0
EtOH	~0
PROG	~0

b. E2#11

Treatment	β -galactosidase activity (Miller units)
E2	~250
ICI	~0
OHT	~0
RAL	~0
EtOH	~0
PROG	~0

c. E2#23

Treatment	β -galactosidase activity (Miller units)
E2	~600
ICI	~0
OHT	~0
RAL	~0
EtOH	~0
PROG	~0

d. E3#6

Treatment	β -galactosidase activity (Miller units)
E2	~750
ICI	~50
OHT	~0
RAL	~100
EtOH	~0
PROG	~0

e. OHT#33

Treatment	β -galactosidase activity (Miller units)
E2	~110
ICI	~10
OHT	~0
RAL	~0
EtOH	~0
PROG	~0

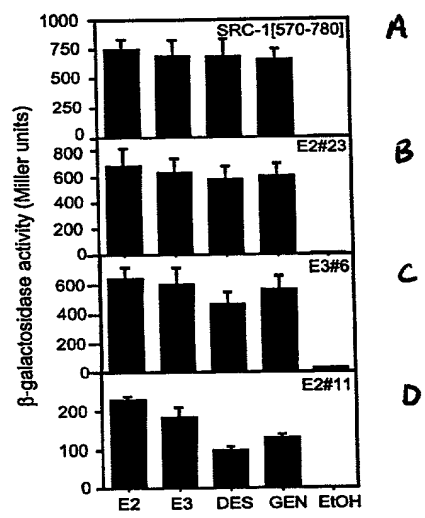
f. wild type FN3

Treatment	β -galactosidase activity (Miller units)
E2	~0
ICI	~0
OHT	~0
RAL	~0
EtOH	~0
PROG	~0

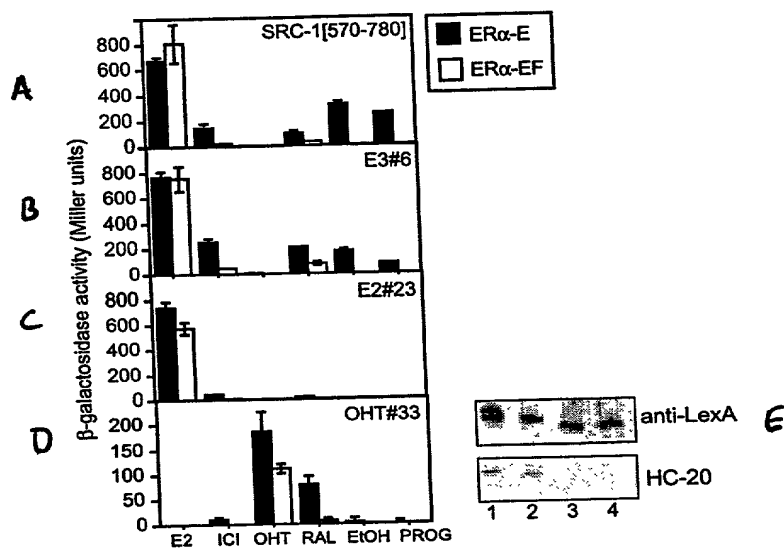
g. SRC-1 #570-780

Treatment	β -galactosidase activity (Miller units)
E2	~800
ICI	~0
OHT	~0
RAL	~0
EtOH	~0
PROG	~0

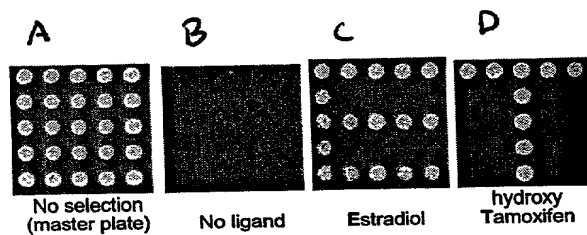
FIGURES 14A-H



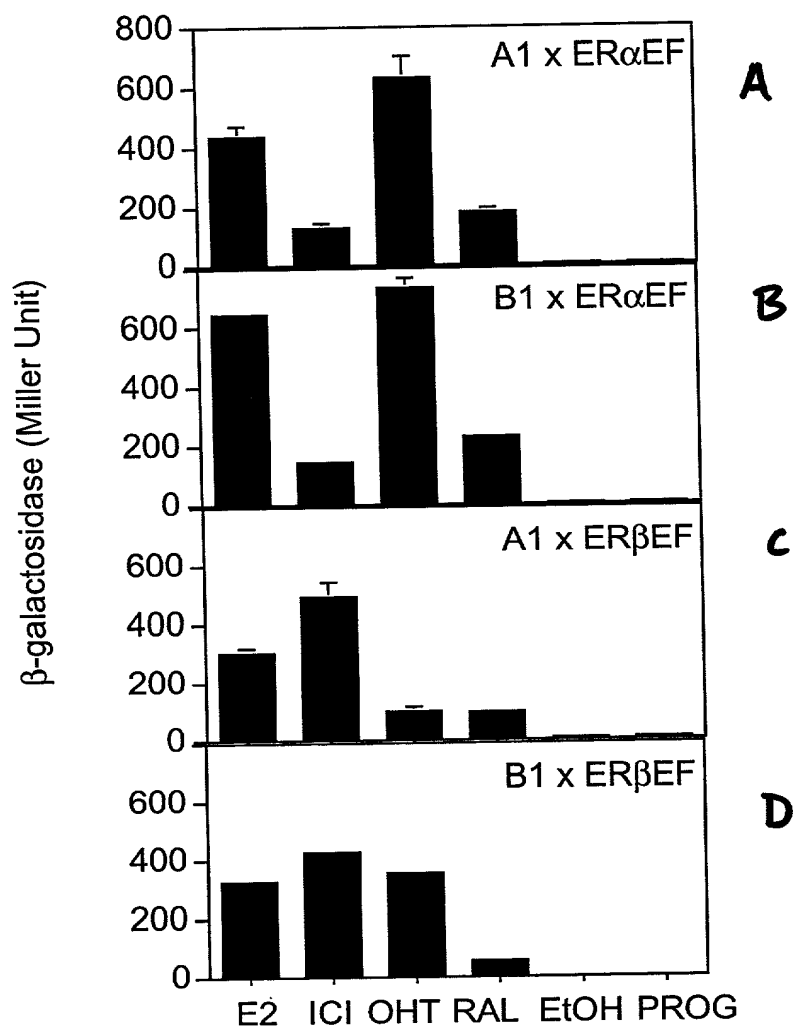
FIGURES 15A-D



FIGURES 16A-E



FIGURES 17A-D



FIGURES 18A-D